TRESHCHINSKIY, A.I.; CHEPKIY, L.P.

Changes in the electric potentials of the skin in cerebral tumors. Vop. neirokhir. 17 no.5:14-18 S-O '53. (MLRA 6:11)

1. Institut neyrokhirurgii Ministerstva zdravookhraneniya USSR.
(Skin) (Brain--Tumors) (Electrophysiology)

TRESHCHINSKIY, A. I.

"Neuralgic Syndromes Due to Affections of the Trafacial Nerve." (Dissertation for Degree of Candidate for Medical Sciences.) Odessa State Medical Inst imeni N. I. Pirogov, (Odessa), 1955

SO: M-1036 28 Mar 56

DINABURG, A.D.; TRESHCHINSKIY, A.I.

Clinical aspects of lesions of the cervical intervertebral disks. Zhur.nevr. i psikh. 55 no.10:721-727 '55 (MLRA 8:11)

1. Otdel klinicheskoy i eksperimental'noy nevrologii (zav. prof. A.F.Makarchenko) Institutafiziologii imeni A.A.Bogomol'tsa AN USSR i Institut neyrokhirurgii Ministerstva zdravookhraneniya USSR, Kiyev.

(INTERVERTEBRAL DISKS, diseases,
causing neuralgias, cervical disks)

(NEURALGIA, etiology and pathogenesis,
intervertebral disk lesions, cervical)

(NERVES, SPINAL, diseases
radicular synd.caused by cervical disk lesions)

TRESHCHINSKIY, A.I. (Kiyev, ul. Otradnaya, d. 32); FAYNZIL'BER, Ya.I.,
(Kiyev, ul. Otradnaya, d.32)

Neuralgic syndromes caused by lesions of the otic ganglion. Nov. khir.arkh. no.2:68-71 Mr-Ap '57. (MLRA 10:8)

1. Nauchno-issledovatel'skiy institut neyrokhirurgii Ministerstva zdravookhraneniya USSR
(NEURALGIA, FACIAL) (EAR--DISEASES)

Treshchinskiy, A.I.

PEL'TS, B.A.; TRESHCHINSKIY, A.I. (Kiyev)

New method for recording Babinski's syndrome and the plantar reflex. Vrach.delo supplement '57:85-86 (MIRA 11:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut neyrokhirurgii Ministerstva zdravookhraneniya USSR.
(REFLEXES)

MOROZOVA, N.P., kand.med.nauk, referent; TRESHCHINSKIY, A.I., referent;
GORODINSKIY, D.M., dotsent, referent

Minutes of meetings of the Kiev and Kiev Province Surgical Societies.
Nov.khir.arkh. no.6:128-134 N-D '59. (MIRA 13:4)
(KIEV PROVINCE--SURGICAL SOCIETIES)

GORODINSKIY, D.M., dotsent; TRESHCHINSKIY, A.I.; BOYKO, V.I., dotsent

Transactions of meetings of the Kiev and Kiev Province Surgical Society. Nov.khir.arkh. no.5:133-141 S-O '59. (MIRA 13:3)
(KIEVPROVINCE--SURGICAL SOCIETIES)

AMOSOV, N.M.; LISSOV, I.L.; MOKHNYUK, Yu.N.; SIDARENKO, L.N.; TRESHCHINSKIY, A.I.

Heart operations with the use of artificial blood circulation. Grud. khir. 2 no.6:18-30 N-D '60. (MIRA 14:1)

1. Iz kliniki torakal'noy khirurgii Ukrainskogo instituta tuberkuleza (dir. - dotsent A.S. Mamolat) i kafedry torakal'noy khirurgii Kiyevskogo instituta usovershenstvovaniya vrachey (dir. - dotsent M.N.Umovist). Adres avtorov: Kiyev, 38, Baykovaya gora, Institut tuberkuleza.

(BLOOD—CIRCULATION, ARTIFICIAL)
(HEART—SURGERY)

TRESHCHINSKIY, ~~A.I.~~

"Intervertebral disks" by A.D.Dinaburg, A.E.Rubashova. Zhur. nevr. i psikh. 60 no.10:1386-1388 '60. (MIRA 14:1)
(INTERVERTEBRAL DISK) (DINABURG, A.D.)
(RUBASHOVA, A.E.)

AMOSOV, N.M., prof.; LISSOV, I.L.; MOKHNYUK, Yu.N.; SIDARENKO, L.N.;
TRESHCHINSKIY, A.I.

Preliminary experience with the use of artificial circulation in cardiac surgery. Vest.khir. 86 no.3:10-20 Mr '61.
(MIRA 14:3)

1. Iz Ukrainskogo instituta tuberkuleza (dir. - dotsent A.S. Mamolat) i Kiyevskogo instituta usovershenstvovaniya vrachey (dir. - dotsent M.N. Umovist).
(BLOOD—CIRCULATION, ARTIFICIAL)

AMOSOV, Nikolay Mikhaylovich, prof.; LISSOV, Igor' Leonidovich;
SIDARENKO, Lena Nikolayevna; Prinimali uchastiye: TRESHCHINSKIY,
A.I.; MOKHNYUK, Yu.N.; MALAKHOVA, A.V.; BEREZOVSKIY, K.K., red.;
CHUCHUPAK, V.D., tekhn. red.

[Heart surgery with artificial blood circulation] Operatsii na serdtse s iskusstvennym krovoobrashcheniem. Pod red. N.M. Amosova. Kiev, Gos.med.izd-vo USSR, 1962. 245 p. (MIRA 16:7)

1. Chlen-korrespondent AMN SSSR (for Amosov).
(HEART--SURGERY) (PERFUSION PUMP (HEART))

TRESHCHINSKIY, A.I.; NIKOLAYEV, Yu.A.; UMANSKIY, M.A.; BELAN, S.N.;
LYAVINETS, A.S.; MALOVICHKO, A.Ya.; PIVCHIK, D.T.

Effect of andaxin on healthy people. Vrach.delo no.11:149-150 N '62. (MIRA 16:2)

1. Kafedra torakal'noy khirurgii i anesteziologii (zav. - prof. N.M. Amosov) Kiyevskogo instituta usovershenstvovaniya vrachey.
(MEPROBAMATE)

BRATUS', V.D., dots., otv. red.; AMOSOV, N.M., prof., red.; KOLOMIYCHENKO, M.I., prof., red.; FEDOROVSKIY, A.A., prof., red.; TUROVETS, I.G., prof., red.; KLOCHKOV, I.Ye., dots., red.; LEVCHUK, G.A., dots., red.; TRESHCHINSKIY, A.I., dots., red.; KOCHKOV, I.Ye., red.; CHUCHUPAK, V.D., tekhn.red.

[Problems of anesthesiology] Voprosy anesteziologii. Sbornik nauchnykh rabot, posviashchennyi 70-letiiu so dnia rozhdeniia chlena-korr. AN USSR, zasl. deiatelia nauki prof. I.N.Ishchenko. Kiev, Gosmedizdat USSR, 1963. 254 p. (MIRA 16:7)

1. Kiev. Medychnyi instytut.
(ISHCHENKO, IVAN NIKOLAEVICH, 1891-) (ANESTHESIOLOGY)

UMANSKIY, M.A.; TRESHCHINSKIY, A.I.; LOBODYUK, M.S. (Kiyev).

Use of protamine sulfate in surgery with artificail blood circulation. Vrach. delo no.11:133 N'63 (MIRA 16:12)

1. Klinika torakal'noy khirurgii (zav.-chlen-korrespondent AMN-SSSR, prof. N.M.Amosov) Ukrainskogo instituta tuberkuleza i grudnoy khirurgii.

TRESHCHINSKIY, A.I., doktor med.nauk; CHEPKIY, L.P., doktor med.nauk;
NIKOLAYEV, Yu.A., kand.med.nauk

Book review. Eksper. khir. i anest. 9 no.5:95-96 S-O '64.
(MIRA 18:11)

TRESHCHINSKIY, A.I.; LYAVINETS, A.S.

Review of Jiri Pokorny's book "Controlled hypotension in anesthesiology. Eksper. khir. i anest. 9 no.2:94-95 Mr-Ap '64.
(MIRA 17:11)

TEREKHOV, N.T., dotsent; TRESHCHINSKIY, A.I., dotsent; GOL'[illegible], V.N.,
kand. med. nauk; ZIN'KOVSKIY, M.F.

Prevention of acute renal insufficiency in connection with hemolysis in surgery with artificial blood circulation. Vest. khir. 93 no.11:9-16 N '64. (MIRA 18:6)

1. Iz kliniki khirurgii serdtsa (zav. - prof N.M. Amosov) Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza i grudnoy khirurgii imeni Yanovskogo.

DARBINYAN, T.M., prof. (Moskva); TRESHCHINSKIY, A.I., dotsent (Kiyev);
UVAROV, B.S., dotsent (Leningrad)

Theoretical fundamentals and prospects in the development of anesthesiology. Sov.med. 28 no.4:148-150 Ap '65. (MIRA 18:6)

TRESHCHOTNIK, N.

"Accountants of the Collective Farms Learn." p. 27,
(KOOPERATIVNO ZEMEDELIE, Vol. 9, No. 10, 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

[illegible]

Dissertation: "Interaction of Urea With Ammonium Salts" Cand Chem Sci, Moscow Academy of Agriculture imeni K. A. Timiryazev, Moscow, 1953. Referativnyy Zhurnal--Khimiya, Moscow, No 7, Apr 54.

SO: SUM 284, 26 Nov 1954

USSR

Solubility polytherms in the system urea-ammonium-monophosphate-water from −15.3 to +40.6°. V. A. Pobedin and A. G. Tushchov (K. A. Timiryazev Agr. Acad., Moscow) [illegible] 27, 57-69(1953).—See C.A. [illegible] ; Rostar Leach

RACHINSKIY, V.V., doktor khim.nauk; TRESHCHOV, A.G.; KOLOSOV, I.V.

[Handbook on the use of isotopes and radiation in agriculture]
Praktikum po primeneniiu izotopov i izluchenii v sel'skom
khoziaistve. Pod obshchei red. V.V.Rachinskogo. Moskva, Mosk.
sel'khoz.akad. No.5. [Radiochemistry] Radiokhimiia. 1960.
98 p. (MIRA 14:4)
(Radioisotopes) (Agricultural research)

TRESHCHOVA, YE. G.

LEVINA, R.Ya.; SKVARCHENKO, V.R.; KUZ'MIN, M.G.; TRESHCHOVA, Ye.G.

Synthesis of hydrocarbons. Part 17: Partial reduction of hydrocarbon dienes with conjugated double bond systems using sodium in liquid ammonia. Zhur. ob. khim. 26 no.8:2195-2199 Ag '56. (MLRA 10:11)

1. Moskovskiy gosudarstvennyy universitet.
(Olefins) (Hexadiene)

LEVINA, R.Ya.; KIM DYAY GIR, SMIRNOVA, E.N.; ORLOVA, N.D.; TRESHCHOVA,
Ye.G.

Synthesis of hydrocarbons. Part 59: (0,1,3)-bicyclohexanes with two quaternary carbon atoms. Zhur.ob.khim. 27 no.7:1779-1783 Jl '57. (MIRA 10:10)

1.Moskovskiy gosudarstvennyy universitet.
(Bicyclohexane)

YUR'YEV, Yu.K.; MEZENTSOVA, N.N.; MELENT'YEVA, T.A. TRESHCHOVA, Ye.G.

The chemistry of selenophene. Part 7: Synthesis and acetylation of 3-arylselenophenes and 2,3-benzoselenophene. Zhur. ob. khim. 27 no.8:2260-2267 Ag '57. (MLRA 10:9)

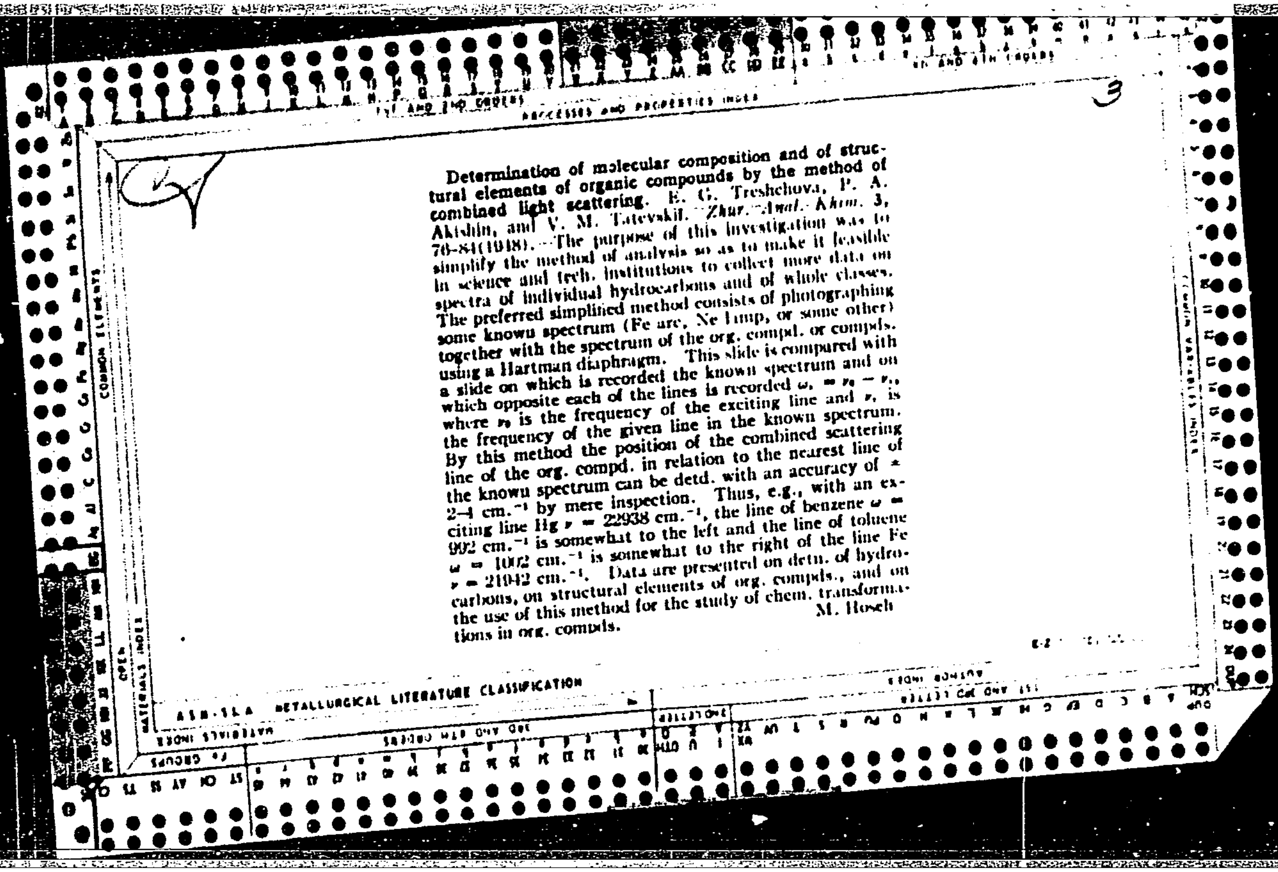
1. Moskovskiy gosudarstvennyy universitet.
(Selenophene)

TRESHCHOVA, Ye.G.

LEVINA, R.Ya.; SHABAROV, Yu.S.; DAUKSHAS, V.K.; TRESHCHOVA, Ye.G.

2,4-Dimethylpentadiene-1,3 in the synthesis of alkanes with two quaternary carbon atoms separated by a CH_2-group (ditertiary alkylmethanes). Dokl. AN SSSR 113 no.6:1286-1289 Ap '57.

1. Predstavleno akademikom A.N. Nesmeyanovym.
(Paraffins) (Pentadiene) (Methane)

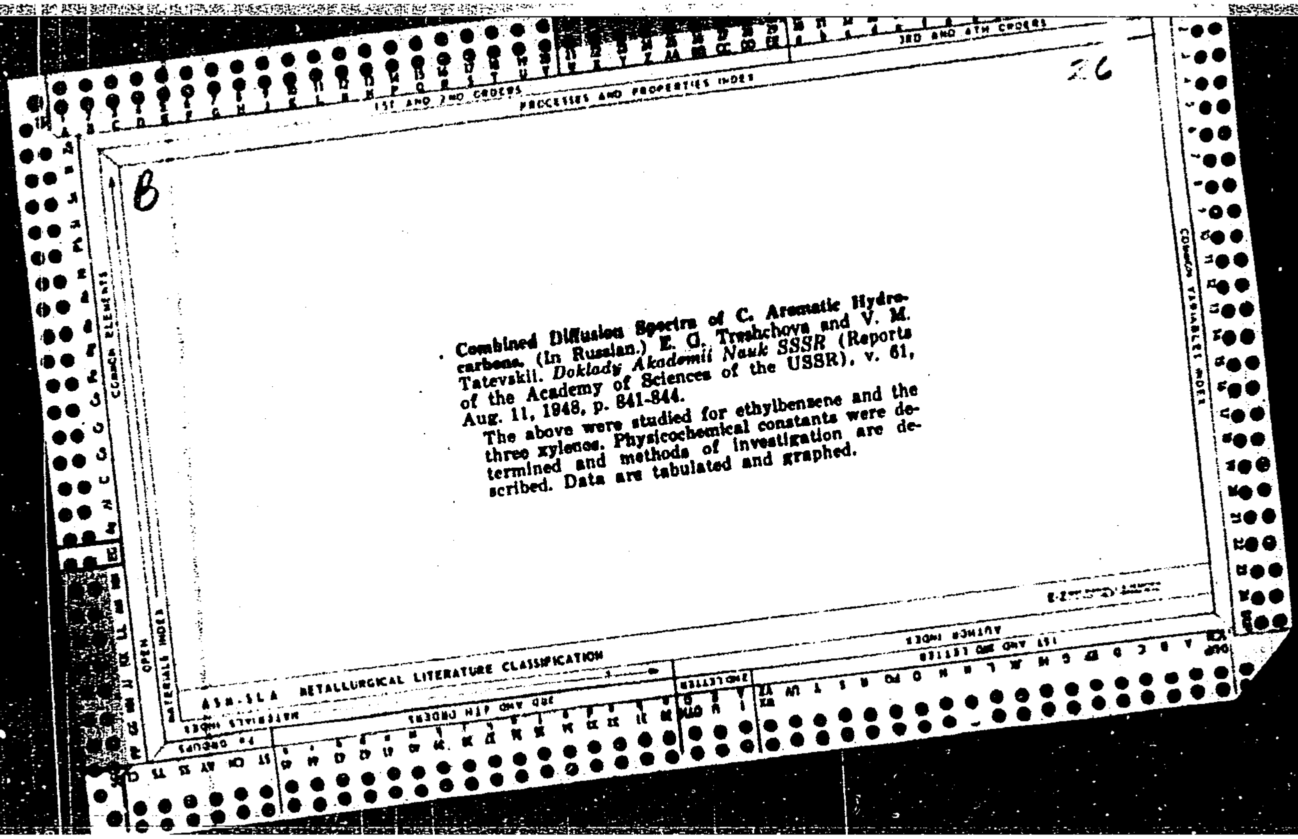

1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3
COMMON ELEMENTS
MATERIALS INDEX
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Determination of molecular composition and of structural elements of organic compounds by the method of combined light scattering. E. G. Treshchova, P. A. Akishin, and V. M. Tatevskil. *Zhur. Anal. Khim.* 3, 76-84(1948).—The purpose of this investigation was to simplify the method of analysis so as to make it feasible in science and tech. institutions to collect more data on spectra of individual hydrocarbons and of whole classes. The preferred simplified method consists of photographing some known spectrum (Fe arc, Ne lamp, or some other) together with the spectrum of the org. compd. or compds. using a Hartman diaphragm. This slide is compared with a slide on which is recorded the known spectrum and on which opposite each of the lines is recorded $\omega_i = \nu_0 - \nu_i$, where ν_0 is the frequency of the exciting line and ν_i is the frequency of the given line in the known spectrum. By this method the position of the combined scattering line of the org. compd. in relation to the nearest line of the known spectrum can be detd. with an accuracy of ± 2-4 cm.$^{-1}$ by mere inspection. Thus, e.g., with an exciting line Hg ν = 22938 cm.$^{-1}$, the line of benzene ω = 992 cm.$^{-1}$ is somewhat to the left and the line of toluene ω = 1002 cm.$^{-1}$ is somewhat to the right of the line Fe ν = 21942 cm.$^{-1}$. Data are presented on detn. of hydrocarbons, on structural elements of org. compds., and on the use of this method for the study of chem. transformations in org. compds. M. Hosch

TRESHCHOVA, Ye. G.

Treshchova, Ye. G. - " Combination scattering spectra of aromatic C_8 hydrocarbons,"
Vestnik Mosk. un-ta, 1948, No. 11, p. 149-53

So: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 13, 1949)


2C
B
1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS
COMMON ELEMENTS
COMMON VARIABLES INDEX
MATERIALS INDEX
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION
AUTHOR INDEX

Combined Diffusion Spectra of C. Aromatic Hydrocarbons. (In Russian.) E. G. Treshchova and V. M. Tatevskii. *Doklady Akademii Nauk SSSR* (Reports of the Academy of Sciences of the USSR), v. 61, Aug. 11, 1948, p. 841-844.

The above were studied for ethylbenzene and the three xylenes. Physicochemical constants were determined and methods of investigation are described. Data are tabulated and graphed.

PA 16/49T26

TRESHCHOVA, Ye. G.

USSR/Chemistry - Organic Compounds, Determination of Aromatic in Gasoline
Chemistry - Analysis, Spectrochemical

Sep 48

"Quantitative Determination of Aromatic Hydrocarbons C_6—C_8 in Cracking Gasoline by the Method of Combined Dispersion of Light," M. D. Tilicheyev, P. A. Akishin, Ye. G. Treshchova, V. M. Tatevskiy, Cen Inst of Aviation Fuels and Lubricants and Moscow State U, 8½ pp

"Zavod Lab" Vol XIV, No 9

Measures frequency and intensities of lines in combination dispersion spectra of aromatics-ethylbenzene, o-, m-, and p-xylenes. Demonstrates possibility of determing these aromatics in cracking gasolines in the presence of alkenes by this method for 60 artifical mextures. Concentration of individual compounds varied 2 -40%.

PA 16/49T26

TRESHCHOVA, Ye. G.

USSR/Chemistry - Hydrocarbons, Aromatic Aug 48
Chemistry - Hydrocarbons, Raman Spectra

"Spectra of the Combined Dispersion of Aromatic C_8 Hydrocarbons," Ye. G. Treshchova, V. M. Tatevskiy, Moscow State U imeni M. V. Lomonosov, 4 pp

"Dok Ak Nauk SSSR" Vol LXI, No 5

Raman spectra of following hydrocarbons with the purity indicated are reported: ethylbenzene 99.4%, o-xylene 98.4%, m-xylene (purity undetermined) and p-xylene 97.2%.

[redacted] 24/49T17

TRESHCHOVA, Ye. G.

USSR/Chemistry - Synthesis Jan 49
Chemistry - Bonds

"Synthesis of Aliphatic and Paraffin Hydrocarbons: VI, Diene Hydrocarbons in the Synthesis of Olefin Hydrocarbons With the Double Bond in the Center," R. Ya. Levina, V. R. Skvarchenko, Yu. B. Kagan, Ye. G. Treshchova, Lab of Org Chem imeni N. D. Zelinskiy, Moscow State Ord of Lenin U, 6 1/2 pp

"Zhur Obshch Khim" Vol XIX, № 1

In the reaction between allyl halides and organomagnesium compounds used for preparing 1-alkenes, the double bond causes an exchange of the halogen for a radical. In present study, 1,4-dichloro-2-butene and its bromine analogue, prepared by halogenation of 1,3-butadiene, reacted with methylmagnesium bromide or iodide. Both halogens of these compounds were substituted by methyls theoretically forming 10% 3-hexane in the case of dibromide and up to 40% in the case of dichloride; 1,3-butadiene was formed as a by-product. The 1,2-dichloride of butadiene undergoes an allyl rearrangement to a 1,4-compound, and subsequently forms an alkene with the double bond in central position. Submitted 29 Oct 47.

58/49T42

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Spectra of combination scattering of alkadienes with an isolated or conjugated system of double bonds. V. M. Tatevskii, E. G. Treshchova, V. R. Skvarchenko, and R. Ya. Levina. *Zhur. Fiz. Khim.* 23, 657-63(1949); cf. C.A. 43, 2867i.—The intensity *I* of 2 main Raman lines between 1600 and 1700 cm.$^{-1}$ is for conjugated double bonds 5-10 times that of nonconjugated. The increase in *I* is greater the greater the exaltation of the mol. refraction, MR (cf. Shorygin, C.A. 42, 2620a). 1,5-Hexadiene: b_{760} 59.5°, d_4^{20} 0.6915, n_D^{20} 1.4040, MR 28.90; main Raman lines and, in parenthesis, their *I* with the assumption that the *I* of the C:C line of 1-alkenes at 1642 cm.$^{-1}$ is 120 per mol. and cm.$^{-1}$ are 1270 (50), 1290 (125), 1416 (85), 1640 (230), 2984 (110), 2915-2930 (120), 2970 (65), 3003 (100), and 3081 (75). 2,5-Dimethyl-1,5-hexadiene: b_{760} 114°, d_4^{20} 0.7505, n_D^{20} 1.4363, MR 37.92; 1115 (85), 1434-1442 (90), 1649 (210), 1672 (22), 2884 (200), 2915-2930 (200), and 2946 (170). 2,4-Hexadiene: b_{760} 82°, d_4^{20} 0.7196, n_D^{20} 1.4516, MR 30.77; 434 (100), 1150 (150), 1170 (185), 1241(130), 1270 (80), 1302 (160), 1382 (110), 1440 (135), 1650 (1400), 1668 (800), 2861 (160), 2860 (200), 2910 (170), 2998 (115), and 2968 (125). 2,5-Dimethyl-2,4-hexadiene: b_{760} 131-131.5°, d_4^{20} 0.7680, n_D^{20} 1.4760, MR 40.03; 295 (60), 407 (60), 840 (8), 883 (85), 1070 (80), 1096 (60), 1156 (750), 1228 (320), 1366 (340), 1382 (600), 1442 (210), 1460 (290), 1650 (1300), 1665 (2200), 2861 (340), 2915-2930 (450), 2968 (100), and 2980 (150). Line 1302 cm.$^{-1}$ belongs to normal alkenes, RCH:CHR. J. J. B.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

5.3100

69840

S/051/60/008/03/015/038
E201/E191

AUTHORS: Treshchova, Ye.G., Panchenko, Yu.N., Vasil'yev, N.I., Kus'min, M.G., Shabarov, Yu.S., and Levina, R.Ya.

TITLE: Raman Spectra of Hydrocarbons of Various Classes. VI. The Raman Spectra of Some Arylcyclobutanes

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 3, pp 371-375 (USSR)

ABSTRACT: The authors investigated the Raman spectra of phenylcyclobutane and of the following arylcyclobutanes: m-tolylcyclobutane, n-tolylcyclobutane, o-anisylcyclobutane, n-anisylcyclobutane; for the sake of comparison the Raman spectra of phenylcyclopropane and n-tolylcyclopropane were also obtained. The apparatus, the experimental technique and the methods of calculation were the same as in earlier work (Ref 6). The results are given in Tables 2-4, and the properties (such as the melting point, refractive index, etc) of the four arylcyclobutanes and of phenylcyclobutane are listed in Table 1. The Raman spectra of all four arylcyclobutanes included frequencies characteristic of the appropriate mono- and dialkylbenzenes and alkykcyclobutanes. The intensity of the Raman lines characteristic of the

Card 1/2

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E201/E191

Raman Spectra of Hydrocarbons of Various Classes. VI. The Raman Spectra of Some Arylcyclobutanes

four-member cycle and of the benzene ring (lines in the region ~1000-1600 cm^{-1}) is greater in the spectra of arylcyclobutanes than the intensities of the corresponding lines in spectra of alkylcyclobutanes and alkylbenzenes. This behaviour of the intensities was not observed in the case of lines at ~600-800 cm^{-1}, which are characteristic of the benzene ring.
There are 4 tables and 7 Soviet references.

Card 2/2

SUBMITTED: July 3, 1959

LEVINA, R. YA. - SHUSHERINA, N. P. - TRESHCHOVA, YE. G.

Hydrocarbons

Synthesis of hydrocarbons, Part 16. Synthesis of 2, 3, 4-trimethylhexane, an isononane. Vest. Mosk. un. 5, no. 9, 1950.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

TRESHCHOVA, E. G.

Levina, R. Ya., Skvarchenko, V. R., Treshchova, E. G., and Tatevskii, V. M. - "Synthesis of hydrocarbons. IX. Diene hydrocarbons in the synthesis of olefinic hydrocarbons with a central double bond." (p. 419)

SC: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1950, Vol. 20, No. 3.

TRESHCHOVA, E. G.

Synthesis of hydrocarbons. X. Partial reduction of conjugated-diene hydrocarbons by sodium in liquid ammonia. R. Ya. Levina, V. R. Skvarchenko, V. M. Tatevsky, and E. G. Treshchova (*J. gen. Chem. USSR*, 1950, 20, 684—690 [U.S. transl., 721—726]; cf. A., 1950, II, 175).—Partial reduction of $(CHMe{:}CH)_2$ by Na in liquid NH_3 affords a mixture of the 1 : 2- and 1 : 4-dihydro-compounds, $CHMe{:}CHPr^n$ (60—65%) and $({:}CHEt)_2$ (35—40%), and is thus unsuitable for the prep. of the latter; Raman-spectral analysis (details given and discussed) proves the presence of both *cis*- (30%) and *trans*-forms (70%). $CHMe{:}CHPr^n$ is synthesised, for comparison purposes, from $CHMe{:}CH{\cdot}CH_2Cl$ and EtMgBr, a mixture of *cis*- (20%) and *trans*-forms (80%) being obtained.

Slow addition of $(CHMe{:}CH)_2$ (16 g.) in Et_2O to Na (16 g.) in liquid NH_3 at −50° to −60°, stirring for 5—6 hr., and keeping overnight afford a product, C_6H_{12} (75%), b.p. 67—67·5°/761 mm., d_4^{20} 0·6802, n_D^{20} 1·3962 [freed from starting materials by $({:}CH{\cdot}CO)_2O$] which is analysed spectrographically (Raman-spectral lines tabulated). Reaction of aq. HCl with $(CH_2{:}CH)_2$ affords 1-chlorobut-2-ene, b.p. 84°/748 mm., d_4^{20} 0·9282, n_D^{20} 1·4350, and 3-chlorobut-1-ene, b.p. 64°/748 mm., d_4^{20} 0·8990, n_D^{20} 1·4150; both isomers react with EtMgBr in Et_2O in the usual manner and give identical products, viz., mixed *cis*- and *trans*-hex-2-ene, b.p. 67·5—67·7°/748·5 mm., d_4^{20} 0·6805, n_D^{20} 1·3940. E. S. Stern.

TRESHCHOVA,/E. G.

Synthesis of hydrocarbons. XI. Partial reduction of conjugated-diene hydrocarbons by sodium in liquid ammonia. R. Ya. Levina, V. R. Skvarchenko, E. A. Viktorova, V. M. Tatevsky, and E. G. Treshchova (J. gen. Chem. USSR, 1950, 20, 690--696 (U.A. transt., 727--732); cf. preceding abstract). -- Partial reduction of $(CMe_2{:}CH)_2$ by Na in liquid NH_3 affords $CHBu'{:}CMe_2$ (73%) and confirms that under these conditions 1 : 2-addition of nascent H preferentially occurs (and not 1 : 4-addition as thought hitherto).

Isomerisation of $Ch_2{:}CMe{\cdot}(CH_2)_2{\cdot}CMe{:}Ch_2$, b.p. 113-114°/ 755 mm., d 2/4° 0.7505, n 2/d° 1.4303 (from $CH_2{:}CMe\ CH_2Cl$ and Mg) over Cr_2O_3-Al_2O_3at 250° gives $(CMe_2{:}CH)_2$ (83%), b.p. 134--134·5°/ 747 mm., d7° 0-7636, 1·4760, which on addition to Na in liquid NH_3 at -- 50° to -- 60° (5 hr.), and then at room temp. (overnight) affords $CHBu'{:}CMe_2$ (73%), b.p. 111 2 -- 111 5 /747 mm., d2/4° 0·7182, n 2/4° 1·4120. The structure of this is proved by Ramanspectral analysis and by ozonisation (with 6% O_3; $CHCI_2$ solution), which gives acctone peroxide, m.p. 130·5 -- 131·5 , and Bu' CO_2H, b.p. 174° (phenylphenacyl ester, m.p. 77).

E. S. Siren

TRESHCHOVA, Ye. G.

May/June 51

USSR/Chemistry - Hydrocarbons

"Synthesis of Hydrocarbons. Communication No 25: Synthesis of Alkenes With a Quaternary Carbon Atom by Pyrolysis of Acetates," R. Ya. Levina, A. A. Faynzil'berg, T. I. Tantsyreva, Ye. G. Treshchova.

"Iz Ak Nauk SSSR, Otdel Khim Nauk," No 3, pp 321-327

Describes application of method of acetate pyrolysis for synthesis of 4, 4-dimethylhexene-2. Established (with aid of spectra of combination light dispersion) that pyrolysis of acetic acid ester of secondary alc of pinacolinic type (4, 4-dimethylhexanol-3) leads principally (to extent of 96% of total) to formation of trans-form of the alkene, i.e. substance that has same carbon skeleton as initial alc.

183T13

TRESHCHOVA, Ye. G. Feb 51

USSR/Chemistry - Petroleum Hydrocarbons

"Isomerization of Unsaturated Hydrocarbons Through Their Contact With Oxides of Metals. XII. Production of Methylpentadienes by Dehydration of Dimethallylcarbinol Over Chromium Oxide on Aluminum Oxide," P. Ya. Levina, A. A. Faynzil'berg, V. M. Tatevskiy Ye. G. Treshchova, Lab Org Chem Imeni, Acad N. D. Zelinskiy, and Lab Mol Spectroscopy, Moscow State U

"Zhur Obshch Khim" Vol XXI, N 2, pp 233-239

Dehydrated dimethallylcarbinol over mixed catalyst of Cr and Al oxides to yeild 2-methylpentadiene- 1,4 (I) and pair with close bp composed of 2-methylpentadiene-2,4 (II) and 2-methylalyst of Cr and Al oxides into mixt of II and III. Yield 59% of theoretical. Compn checked by Spectrography. Mechanism proposed.

176T11

Feb 51

TRESHCHEVA, Ye. G.

USSR/Chemistry - Petroleum Hydrocarbons

"Isomerization of Polymethylene Hydrocarbons Under Influence of Aluminum Chloride. XVI. Isomerization of 1,-1-Dimethylcyclopentane," M. B. Turova-Polyak, V. A. Adamova, Ye. G. Treshcheva, Lab Org Catalysis, Moscow State U

"Zhur Obshch Khim" Vol XXI, No 2, pp 250-255

1,1-Dimethylcyclopentane mixed with aluminum chloride, though unreactive at room temp, was coverted into methylcyclohexane with yield of 92-97% after 10-15 hr heating at 100-115°. Presence of quaternary C atom in 1,1-dimethylcyclopentane did not impede this isomerization.

176T14

TRESHCHOVA, E. G.

"Isomerization of Polymethylene Hydrocarbons under the Influence of Aluminum Chloride. XVII. Isomerization of Methylcyclohexane, 1,1-Dimethylcyclohexane, 1,2-Dimethylcyclohexane and Ethylcyclohexane." by N. D. Zelinsky, M. B. Turova-Polyak, N. F. Tsvetkova, and E. G. Treshchova. (p. 2156)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii), 1951, Volume 21, no. 12

TRESHCHOVA, E. G.

"Some New Data on the Isomerization of Cyclohexane by Aluminum Chloride." by N. D. Zelinsky, M. B. Turova-Polyak, N. F. Tsvetkova, and E. G. Treshchova. (p. 2160)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii), 1951, Volume 21, no. 12

TRESHCHOVA, Ye. G.

PA 194T18

USSR/Chemistry - Antiknock Fuels Oct 51

"Spectra of Combination Scattering of Certain C_8-C_{11} Isoalkanes With Tertiary Carbon Atoms," Ye. G. Treshchova, V. M. Tatevskiy, T. I. Tantsyreva, A. A. Faynzil'berg, R. Ya. Levina, Moscow State U imeni M. V. Lomonosov

"Zhur Fiz Khim" Vol XXV, No 10, pp 1239-1247

Measurements of number and intensity of lines in spectra of combination scattering of 2, 4-dimethylhexane, heptane, octane, and nonane, 2, 4, 5-trimethylhexane, 2, 4, 6-trimethylheptane, and 2, 4, 7-trimethyloctane, in agreement with

194T18

USSR/Chemistry - Antiknock Fuels (Contd) Oct 51

theoretical conclusions of B. I. Stepanov, showed that different types of branchings of alkane C skeleton are represented by sp characteristics of spectrum.

194T18

LEVINA, R.Ia.; SHUSHERINA, N.P.; TRESHCHOVA, E.G.

Synthesis of hydrocarbons. XXX. Synthesis of 3,5-dimethylheptane.
Vestnik Moskov. Univ. 7, No.2, Ser. Fiz. Mat. i Estestven. Nauk
No.1, 105-8 '52.
(CA 47 no.13:6333 '53) (MLRA 5:7)

1. Moskovskiy universitet.

TRESHCHOVA, Ye. G.

USSR/Chemistry-Hydrocarbons

Feb 52

"Synthesis of Hydrocarbons. XVII. Hommesitones in the Synthesis of Isoparaffinic Hydrocarbons," R. Ya. Levina, N. P. Shusherina, Ye. G. Treshchova, V. M. Tatevskiy, Lab of Org Chem imeni Acad N. D. Zelinskiy, Moscow State U

"Zhur Obshch Khim"Vol. XXII, No 2, pp 199-208

Developed method to synthesize difficulty obtainable isoparaffins 3, 5-dimethylheptane (I), 3-methyl-5-ethylheptane (II), 3-methyl-5-ethyloctane (III), 3-methyl-5-ethylnonane (IV), 2, 3, 4-trimethylhexane (V), 3, 4, 5-trimethylheptane (VI), none described in the literature. Synthesized I-IV by reaction of mixt of "hommesitones" 3-methylheptene-3-one-5 and 3-methylheptene-2-one-5 (products of condensation of methylethelketone with CaC_2) with org Mg compds, then dehydration of products (unsatd tert alcs) and catalytic hydrogenation of resulting diene hydrocarbons. V and VI were synthesized in same way with exception that "hommesitones" in this case were 3, 4-dimethylhexene-3-one 5 and 3, 4-dimethylhexene-2-one-5 (products of condensation of methylethylketone with HCl).

209T14

5(3)

SOV/79-29-7-24/83

AUTHORS: Radzhabli-Seidova, N. A., Khromov, S. I., Gitina, R. K., Balenkova, Ye. S., Treshchova, Ye. G., Kazanskiy, B. A.

TITLE: Contact Transformations of 1,1-Dimethyl Cyclohexane and 1-Methyl-1-ethyl Cyclohexane in the Presence of an Aluminosilicate Catalyst (Kontaktnyye prevrashcheniya 1,1-dimetiltsiklogeksana i 1-metil-1-etil-tsiklogeksana v prisutstvii alyumosilikatnogo katalizatora)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2212-2218 (USSR)

ABSTRACT: The numerous Russian petroleum types contain among other cycloparaffin hydrocarbons 1,1-dimethyl cyclohexane and 1,1,3-trimethyl cyclohexane (Ref 1). According to reference 2 also the transformations of 1,1-dimethyl cyclohexane at 540° over an aluminosilicate catalyst are described. For the authors it was of interest to investigate the behavior of the most simple mixed methyl alkyl cyclohexanes in the catalytic cracking process over an aluminosilicate catalyst. For this purpose the behavior of 1,1-dimethyl cyclohexane and 1-methyl-1-ethyl cyclohexane over the above catalyst were investigated at 500°. In this connection gaseous products, a liquid condensate, and coke which separated on the catalyst were

Card 1/3

Contact Transformations of 1,1-Dimethyl Cyclohexane and 1-Methyl-1-ethyl Cyclohexane in the Presence of an Aluminosilicate Catalyst SOV/79-29-7-24/83

obtained. The gaseous products were first fractionated at low temperatures and then determined. The liquid condensate was subjected to an accurate rectification, chromatographic adsorption on silica gel as well as to optical and chemical investigations. The following per cent composition of the reaction products of 1,1-dimethyl cyclohexane were found: hydrocarbon 21.4%, liquid paraffin hydrocarbons 2.6%, naphthene hydrocarbons 8.4, aromatic hydrocarbons 45.2%, coke 22.4%. For 1-methyl-1-ethyl cyclohexane (in wt%): 10.8% gaseous hydrocarbons, 23.0% mixture of paraffin naphthene hydrocarbons, 40.5% aromatic hydrocarbons, 25.7% coke. Under the chosen conditions of catalysis the separation of the alkyl groups which are in the quaternary cyclic carbon atom, hydrocracking process, methylation, aromatization as well as the isomerization of the six-membered cycles into five-membered ones take place. The main products are aromatic hydrocarbons and in small quantities paraffin and

Card 2/3

Contact Transformations of 1,1-Dimethyl Cyclohexane and 1-Methyl-1-ethyl Cyclohexane in the Presence of an Aluminosilicate Catalyst SOV/79-29-7-24/83

naphthene-hydrocarbons. The direction of the contact transformations of the mixed dialkyl cyclohexanes are illustrated by the scheme in the experimental part. There are 6 tables and 11 references, 6 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: June 3, 1958

Card 3/3

5(3) SOV/79-29-7-25/83

AUTHORS: Radzhabli-Seidova, N. A., Khromov, S. I., Dorzhin, Ch., Balenkova, Ye. S., Treshchova, Ye. G., Kazanskiy, B. A.

TITLE: Contact Transformations of 1-Methyl-1-propylcyclohexane and 1-Methyl-1-butylcyclohexane on an Aluminum Silicate Catalyst (Kontaktnyye prevrashcheniya 1-metil-1-propiltsiklogeksana i 1-metil-1-butiltsiklogeksana na alyumosilikatnom katalizatore)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2219-2224 (USSR)

ABSTRACT: The authors continued their investigations (Ref 1) and synthesized 1-methyl-1-propylcyclohexane and 1-methyl-1-butylcyclohexane over an aluminum silicate catalyst at 500°; under the earlier conditions also in this case gaseous hydrocarbons, a liquid condensate, and coke separated on the catalyst were obtained. The gaseous products were fractionated at low temperature by means of the apparatus TsIATIM-51-U and the composition of the separated fractions was determined by means of the apparatus VTI. In order to determine the composition of the condensate, rectification, chromatographic adsorption on silica gel as well as optical and chemical methods were applied of investigation. The following wt% were obtained for the

Card 1/2

Contact Transformations of 1-Methyl-1-propylcyclohexane SOV/79-29-7-25/83
and 1-Methyl-1-butylcyclohexane on an Aluminum Silicate Catalyst

transformation products of 1-methyl-1-propyl cyclohexane: gaseous hydrocarbons 23.8%, liquid paraffins 5.9%, naphthenes 20.5%, aromatic hydrocarbons 33.3%, coke 16.5% . The following resulted from 1-methyl-1-butylcyclohexane: gaseous hydrocarbons 30.6%, liquid paraffins 4.8%, naphthenes 17.0%, aromatic hydrocarbons 41.8%, coke 5.8%. The results obtained confirm the rules set up already earlier (Ref 1) for the catalytic transformation of 1,1-dimethyl cyclohexane and 1-methyl-1-ethyl cyclohexane. Also in this case the main products were aromatic hydrocarbons. In the gaseous products saturated hydrocarbons predominate (propane and butane). With increasing number of the carbon atoms in the alkyl group of the above compounds also the intensity of catalytic transformation increases. There are 6 tables and 6 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: June 9, 1958

Card 2/2

5 (3)

AUTHORS: Levina, R. Ya., Kaykaris, P. A. SOV/79-29-7-26/83
Baukh, I., Treshchova, Ye. G.

TITLE: Synthesis of Hydrocarbons (Sintez uglevodorodov). LXIX. A New General Method of the Synthesis of Dineoalkyls ($C_{10}H_{22}$ - $C_{12}H_{26}$), Dineopentyl and Its Homologs (LXIX. Novyy obshchiy put' sinteza dineoalkilov ($C_{10}H_{22}$-$C_{12}H_{26}$)-dineopentila i yego gomologov)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2236 - 2240 (USSR)

ABSTRACT: One of the ethylene hydrocarbons with a quaternary carbon (Refs 1,2), 2,2,5-trimethyl hexene-4 (II) synthesized by the authors already earlier, was obtained by the reaction of primary isoprene hydrobromide with tertiary butyl magnesium chloride (according to Grignard-Wuertz). This compound (II) was used for the synthesis of the difficultly accessible paraffins which have two quaternary carbons separated by two CH_2 groups, i.e. of dineopentyl and its homologs (of the dineoalkyls). Compound (II) was transformed by hydrogen chloride into the saturated tertiary chloride (III), which was caused

Card 1/3

Synthesis of Hydrocarbons. LXIX. A New General Method of the Synthesis of Dineoalkyls ($C_{10}H_{22}$ - $C_{12}H_{26}$), Dineopentyl and Its Homologs SOV/79-29-7-28/83

to react with alkyl magnesium bromides in the presence of $HgCl_2$ (Grignard-Wuertz reaction) and led to compound (IV) (Scheme 1). In the reaction of tertiary chloride (III) with alkyl magnesium bromides also side-reactions took place: the separation of HCl from the tertiary chloride (re-formation of the initial-2,2,5-trimethyl hexene-4(50%)), which was then reduced into the 2,2,5-trimethyl hexane (Scheme 2). This mixture of dineoalkyl and the lower boiling trimethyl hexene and trimethyl hexane which is obtained in any case was separated by fractional distillation. The dineoalkyls purified by a further distillation and by methods of chromatography on silica gel resulted in yields of 10-16%, computed for the tertiary chloride (III) used for the reaction. The Raman spectra confirm the presence of quaternary carbon atoms in them. By the method of the "Grignard-Wuertz reaction carried out two times" the authors synthesized the difficultly accessible dineopentyl (2,2,5,5-tetramethyl hexane) and its homologs

Card 2/3

Synthesis of Hydrocarbons. LXIX. A New General Method of the Synthesis of Dineoalkyls ($C_{10}H_{22}$ - $C_{12}H_{26}$), Dineopentyl and Its Homologs SOV/79-29-7-28/83

$C_{11}H_{24}$ and $C_{12}H_{26}$, 2,2,5,5-tetramethyl heptane, 2,2,5,5-tetramethyl octane, and 2,2,5,5,6-pentamethyl heptane which have hitherto not been described. There are 1 table and 12 references, 3 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: June 27, 1958

Card 3/3

TRESHCHOVA, YE.

13

Fuels

(10)

Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

Synthesis of hydrocarbons. XVIII. The hydrobromide and the hydrochloride of 2-methyl-1,3-pentadiene and 4-methyl-1,3-pentadiene in the synthesis of hydrocarbons with iso structure. R. Ya. Levina, A. A. Fainzil'berg, and E. G. Treshchova (Moscow State Univ.). *J. Gen. Chem. U.S.S.R.* 22, 497-504(1952)(Engl. translation).—See *C.A.* 47, 2678*i*. XX. Synthesis of alkenes and alkanes with a quaternary carbon atom. R. Ya. Levina, T. I. Tantsyreva, and A. A. Fainzil'berg (Lomonosov State Univ., Moscow). *Ibid.* 635-9.—See *C.A.* 47, 2679*d*. XXI. Hydrobromides of diene hydrocarbons in the synthesis of olefinic and paraffinic hydrocarbons with a quaternary carbon atom. R. Ya. Levina and N. P. Shusherina. *Ibid.* 641-6.—See *C.A.* 47, 2679*h*. XXII. Transformation of diene hydrocarbons into cyclopropane hydrocarbons. R. Ya. Levina and B. M. Gladshtein. *Ibid.* 647-52.—See *C.A.* 47, 2680*b*. H. L. H.

6-4-54

TRESHCHOVA, E. G.

Combination scattering spectra of hydrocarbons of various classes. III. Combination-scattering spectra of several alkadienes with a system of isolated or conjugated double bonds. E. G. Treshchova, V. M. Tatevskii, R. Ya. Levina, A. A. Fainzil'berg, and E. A. Viktorova (M. V. Lomonosov State Univ., Moscow). *Zhur. Fiz. Khim.* 26, 1266-71(1952); cf. *C.A.* 43, 7346h(1949).—Raman spectra have been studied of 2-methyl-1,4-pentadiene (I), 2-methyl-2,4-pentadiene (II), 2,3-dimethyl-1,3-butadiene (III), 2,4-pentadiene (IV), 2,4-octadiene (V), and 2,4-hexadiene (VI). The b.p., n_D^{20}, and d_4^{20} in that order are for I, 56.5°, 1.4053, 0.6932; II, 76.3°, 1.4520, 0.7290; III, 68.6°, 1.4390, 0.7262; IV, 105°, 1.4477, 0.7323; V, 132°, 1.4580, 0.7439. Wave nos. and corresponding intensities for I–V are tabulated between 240 and 3131 cm.$^{-1}$ The characteristic lines of II and III are 1630 and 1654 cm.$^{-1}$, resp., with intensities of 678 and 1060 units, resp. IV has 2 characteristic lines at 1654 and 1653 cm.$^{-1}$ with intensities of 1200 and 1050 units, resp. It is concluded that in the 1600–1680-cm.$^{-1}$ region alkadienes with isolated double bonds have either 2 lines or a single line, the total intensity being about twice that of the corresponding alkene line. The characteristic lines in the 1600–1680-cm.$^{-1}$ region of alkadienes with conjugated double bonds are stronger than those of alkenes. IV, V, and VI have spectra almost identical in wave nos. and rather similar in relative line intensities. J. W. L., Jr.

11/29/54

LEVINA, R. Ya.; TANTSYREVA, T.I.; VINOGRADOVA, V.N.; TRESHCHOVA, E.G.

Cyclopentadiene and cyclohexadiene in the synthesis of bicyclic
compounds. Doklady Akad. Nauk S.S.S.R. 85, 107-10 '52. (MLRA 5:8)
(CA 47 no.15:7448 '53)

7

Synthesis of hydrocarbons. XLIII. Partial reduction of diene hydrocarbons with conjugated system of double bonds by sodium in liquid ammonia. R. Ya. Levina, [illegible] V. N. [illegible] [illegible] State Univ. [illegible] diene results in addn. of H mainl[illegible] fractions, and to a minor exte[illegible] the [illegible] With the unsym. diene [illegible] [illegible] hydrocarbons [illegible] [illegible]

showed the absence of any contaminant in the 2,4-dimethyl-3- [illegible] (for comparison a specimen was prepd. by [illegible] acetate [illegible] pentene, b. 57.5-8.5°, n_D^{20} 1.3905, d_{20} 0.6953, and [illegible] material, b. 56.5-67°, which also contained some [illegible] by Raman spectrum of this [illegible] gave [illegible] methyl-1- [illegible]

USSR.

62
4

Conversion of the derivatives of cyclopentane on alumino-silica catalyst. K. V. Topchieva, E. N. Rosolovskaya, E. G. Treshchova, S. S. Novikov, and S. I. Khromov. *Vestnik Moskov. Univ.* 8, No. 12, *Fiz.-Mat. i Estestven. Nauk* No. 8, 97–100(1953).—Cyclopentane (I), methylcyclopentane (II), ethylcyclopentane (III), isopropylcyclopentane (IV), and butylcyclopentane (V) undergo thermal decompn. on tech. Al-silica catalyst (VI) at 500 ± 1°. I and II undergo negligible changes. III yields II, toluene, isopentane, and some unknown hydrocarbons. IV gave derivs. of cyclohexane (66%). V gave a mixt. of mono- and trisubstituted derivs. of C_6H_6 (60%), and also derivs. of cyclopentane. For each expt. 94 ml. of VI was used, and the hydrocarbons were introduced into the quartz tube at a vol. velocity of 0.5. VI is regenerated in air at 500°, and its activity standardized (cf. *Vestnik Moskov. Univ.* 3, No. 11, 135(1948)). M. D.

TRESHCHOVA, E. G.

Synthesis of hydrocarbons. XXXIX. The dichloride of 2,3-dimethyl-1,3-butadiene in the synthesis of alkenes with isostructure and central location of the double bond. R. Ya. Levina, V. R. Skvarchenko, A. S. Okunevich, and E. G. Treshchova (Moscow State Univ.). *Zhur. Obshchei Khim.* 23, 725-8(1953); cf. *C.A.* 45, 535f; 48, 3885h. — Lowering of the temp. of chlorination of $(CMe:CH_2)_2$ (I) does not affect the yield of the product; chlorination was best run at −75° in abs. Et_2O until the theoretical gain in wt. was reached, and evapn. of the solvent gave 32% I *dichloride* (II), b_{16} 80-4°, m. 35°, and also a lower-boiling fraction and 25% unchanged I. To MeMgBr from 120 g. MeBr in 300 ml. Et_2O was added with cooling 39 g. II, and the mixt. allowed to stand overnight, stirred 6 hrs. at room temp. and refluxed 2 hrs., decompn. with 10% AcOH gave 40% I and 23% *3,4-dimethyl-3-hexene*, b_{754} 119-19.5°, b_{760} 119.2-19.4°, n^{20}_D 1.4275, d_{20} 0.7415, whose Raman spectrum contained the following lines: 227(1), 333(0), 409(3), 421(0.5) 455(0.8), 489(2), 519(1), 555(0.5), 585(2), 600(1.5), 679(10), 740(0), 790(0.5), 846(1.5), 907(0), 912(0), 938(3.5), 970(1), 998(1.5), 1018(1), 1056(2.5), 1074(5), 1101(1.2), 1141(1), 1170(1.5), 1190(1.8), 1206(0), 1237(1.5), 1268(2), 1322(5), 1384(5), 1440(2), 1449(10), 1640(0.5) and 1664(20). The 1640 line indicates an impurity of an α-ethylenic hydrocarbon. PrMgBr (from 123 g. PrBr) with 47.5 g. II similarly gave some I, 17% hexane, and 11% *5,6-dimethyl-5-decene*, b_{11} 91.1-1.2°, n^{20}_D 1.4440, d_{20} 0.7782, Raman spectrum (cm.$^{-1}$) 276(1), 333(0.8), 397(0.5), 410(1), 491(1), 522(1), 586(1.5), 603(0.5), 671(0.5), 695(1.5), 735(0.5), 759(1), 792(1), 821(2.5), 845(0.5), 872(3), 895(4), 925(1), 956(1), 999(1), 1050(4), 1058(1), 1085(1), 1102(4), 1133(0.5), 1170(0.5), 1198(1.5), 1241(1), 1290(1.5), 1301(2.5), 1329(1.5), 1382(3), 1408(1), 1443(10), 1459(3), 1640(1.5), and 1665(12). The results indicate a 10% admixt. of an α-ethylenic hydrocarbon, that might have formed by allylic shift of the intermediate unsatd. mono-Cl deriv. during the reaction. Thus, I behaves analogously to $(CH:CH_2)_2$ in that their

(over)

dichlorides yield the α-ethylenic by-products with RMgX (*C.A.* 46, 3941*i*). XL. **Reaction of the dichloride of cyclopentadiene with organomagnesium compounds.** R. Ya. Levina, T. I. Tantsyreva, and E. G. Treshchova. *Ibid.* 729-35.—To 33 g. cyclopentadiene (I) in 1 vol. Et_2O was added with ice-NaCl cooling 35.4 g. Cl; distn. gave 60% *dichloride*, $C_5H_6Cl_2$ (presumably the 3,5-Cl_2 compd. although the *3,4-analog* might be present), b_5 35°, b_{15} 50°, n_D^{20} 1.5026, d_{20} 1.2193, darkens in air and even in N_2. Much high-boiling matter was also formed. To MeMgBr (from 529 g. MeBr) was added with ice-NaCl cooling 120 g. of the dichloride, the mixt. being stirred 3 hrs. at room temp. and 4 hrs. at reflux. Decompn. with dil. AcOH and distn. over Na gave 20% C_7H_{12}, composed of some 60-70% 3,5- and 30-40% *3,4-dimethylcyclopentene* which resulted from allylic shift during the reaction. The mixt. could not be sepd. into components and the whole b_{741} 81-2°, n_D^{20} 1.4200, d_{20} 0.7614. The presence of the Raman line at 1613 cm.$^{-1}$ indicated the cyclopentene structure with Me groups not at the double bond. The mixt. hydrogenated over Ni-Al_2O_3 at 150° yielded *mixed 1,2-* and *1,3-dimethylcyclopentanes*, b_{754} 89.5-90.5°, n_D^{20} 1.4113, d_{20} 0.7457; the compn. of the mixt. was deduced from known consts. of the ingredients (Bazhulin, *et al.*, *C.A.* 42, 6238*i*; Kazanskii, *et al.*, *C.A.* 42, 4535*h*). Similarly EtMgBr gave 12% *mixed 3,4 and 3,5-diethyl-1-cyclopentenes*, b_{741} 140.3°, n_D^{20} 1.4390, d_{20} 0.7922 [it is suggested that the supposedly pure 3,5-di-Et deriv. cited by Barber and English, *C.A.* 46, 440*g*, is also a similar mixt.], and 5% *3-ethylcyclopentene*, b_{741} 97°, n_D^{20} 1.4310, d_{20} 0.7928 (*C.A.* 47, 3248*c*). PrMgBr gave apparently only *3-propylcyclopentene* (although some 4-Pr analog might have been present), b_{745} 125°, n_D^{20} 1.4370, d_{20} 0.7918, in 7% yield. Such a product can arise from formation of alkylcyclopentenylmagnesium bromides, which with H_2O yield the above material. G. M. Kosolapoff

13

6

LEVINA, R.Ya.: TANTSYREVA, T.I.: TRESHCHOVA, Ye.G.

Synthesis of hydrocarbons. Part 40. Reaction of cyclopentadiene dichloride with organomagnesium compounds. Zhur.ob.khim. 23 no.5:729-735 My '53.
(MLRA 6:5)

1. Moskovskiy Gosudarstvenniy universitet. Laboratoriya organicheskoy khimii imeni N.D. Zelinskogo. (Organomagnesium compounds)
(Cyclopentadiene)

TUROVA-POLYAK, M.B.; SOSNINA, I.Ye.; TRESHCHOVA, Ye.G.

Isomerization of polymethylene hydrocarbons under the influence of aluminum. Part 18. Isomerization of dicyclopentyl. Zhur.ob.khim. 23 no.7:1111-1116 Jl '53. (MLRA 6:7)

1. Kafedra organicheskogo kataliza Moskovskogo Gosudarstvennogo universiteta. (Isomerism) (Cyclopentyl)

n^{20}_{D} 1.4400, d_{20} 0.7312 (Raman frequency 1641 cm.$^{-1}$), and 50
allylcyclohexane, b_{750} 151-1.5°, n^{20}_{D} 1.4508, d_{20} 0.8135 (Raman
frequency 1641 cm.$^{-1}$). Cf. Arnold and Dowdall, (*C.A.* 42,
81[illegible]9c). XLIIIA. New reaction of tetrahydrophthalic
anhydrides (products of diene synthesis) with phosphorus
pentoxide. R. Ya Levina, V. R. Skvarchenko, N. S.
Kataeva, and B. G. Treshchova (Moscow State Univ.).
Zhur. Obshchei Khim. 23, 1998-2001(1953); cf. C.A. 48,
9939c; 49, 329e.—The reaction of various substituted
tetrahydrophthalic anhydrides with P_2O_5 does not go through
the formation of a ketene, and the decarbonylation step is
simultaneous with dehydration, in which the α-H atoms
participate. Heating 20 g. 2,3-dimethyl-1,3-butadiene
with 35 g. citraconic anhydride in C_6H_6 9 hrs. gave 53% *1,-*
4,5-trimethyl-1,2,3,6-tetrahydrophthalic anhydride, $b_{1.1}$ 175-
7°, n^{20}_{D} 1.4780, d_{20} 1.1052. This (19.4 g.) treated with 14.4
g. P_2O_5 and heated gently, entered a vigorous reaction
(temp. rose to 200°); the mixt. was then heated to 290°
and finally to 350°, yielding a distillate of 65% pure *1,2,4-*
trimethylbenzene, b_{751} 168.5°, n^{20}_{D} 1.5030, d_{20} 0.8770; the
Raman spectrum also agreed with that of the pure sub-
stance. No indications of mesitylene or 1,2,3-trimethyl-
benzene were found. If the reaction went through the ke-
tene stage, the presence of H atoms in the 1 and 2 positions
would have been necessary. G. M. Kosolapoff

TRESHCHOVA, Ye. G.

USSR/Chemistry - Hydrocarbons Oct 53

"Raman Spectra of Hydrocarbons of Different Types. IV. Raman Spectra of Some Branched Alkanes Containing Tertiary Carbon Atoms," Ye. G. Treshchova, V. M. Tatayevskiy, A. A. Faynzil'berg, N. P. Shusherina, R. Ya. Levina, Moscow State U im M. V. Lomonosov

Zhur Fiz Khim, Vol 27, No 10, pp 1564-71.

Detd the Raman spectra of 2,3-dimethylhexane, 2,3-dimethylheptane, 2,3-dimethyloctane, 2,3,6-trimethylheptane, 3,5-dimethylheptane, 3-methyl-5-ethyloctane, 3,5-dimethylheptane, and 5-methyl-5-ethyloctane. From

272T15

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the data obtained, drew conclusions on the frequencies which correspond to definite types of branching.

TRESHCHOVA, E. G.

USSR/Chemistry - Catalytic conversion

Card 1/2 Pub. 40 - 17/27

Authors : Minachev, Kh. M.; Shuykin, N. I.; Feofanova, L. M.; Treshchova, E. G. and Yudkina, T. P.

Title : Conversions of n-heptane in presence of metals of the Pd group at high temperatures and hydrogen pressures

Periodical : Izv. AN SSSR. Otd. khim. nauk 6, 1067-1074, Nov-Dec 1954

Abstract : The conversions of n-heptane over Ru, Rh, Pd and Pt contacts deposited on silica gel was investigated at hydrogen pressures of 20 at, and temperatures of 460°. It was found that the n-heptane, subjected to above described conditions, experiences several deep conversions with a part of it undergoing complete dehydrocyclization.

Institution : Acad. of Sc.; USSR, The N. D. Zelinskiy Institute of Org. Chemistry

Submitted : February 17, 1954

Tresh[illegible]

7

U.S.S.R.

1/2

Synthesis of hydrocarbons XLV Synthesis of cyclohexene and cyclohexane hydrocarbons with a quaternary carbon atom, based on 1,3-dimethyl [illegible]

R. Ya. [illegible] P. [illegible]

[illegible]

[illegible] diene and MeMgI [illegible]

[illegible] cooling [illegible]

[illegible] yield [illegible]

bp 13? [illegible] 1,4 [illegible]

ethyl-2-[illegible]benzene, bp 161 [illegible] 1.45 [illegible]

[illegible] dimethyl [illegible]

[illegible] 0.8200 [illegible]

[illegible] alcohol [illegible]

[illegible]

1190 (9), 2?0? (1), ?218 (3), 12?8 [illegible]

1309 (1), 1348 (3), 1440 (5), 1400 (10), [illegible]

ethyl [illegible]

die [illegible]

R. YA. LEVINA

0.8005. The Raman spectra of these are as follows: Et- [illegible]

2/2

[illegible]

TRESHCHOVA, E. G.

USSR/Chemistry - Catalytic conversion

Card 1/1 : Pub. 151 - 14/42

Authors : Turova-Polyak, M. G.; Danilova, N. V.; and Treshchova, E. G.

Title : Catalytic alkylation of benzene with butyl alcohol

Periodical : Zhur. ob. khim. 24/9, 1558-1562, Sep 1954

Abstract : The reaction of benzene alkylation with butyl alcohol was realized for the first time in a flowing system at atmospheric pressure. The chemical properties of the reaction products obtained are described. A temperature of 300°, molar ratio of benzene : n-butyl alcohol of 4 : 1 and a volumetric rate of feeding the reaction mixture of 0.66 - 2.4 are considered the optimum conditions favorable for the derivation of butyl benzenes. The percentage yield of butyl benzene was calculated. Fifteen references: 9-USA; 1-German and 5-USSR (1929-1953). Tables; graphs.

Institution : State University, Moscow

Submitted : April 19, 1954

TRESHCHOVA, L. G.

10
8
0

CH

Transformation of methylcyclohexane in contact with metals of the palladium group in a flow system at elevated temperature and pressure of hydrogen. N. I. Shuikin, Kh. M. Minachev, L. M. Feofanova, E. G. Treshchova, T. P. Yudkina, and A. E. Agronomov (N. D. Zelinskii Inst. Org. Chem., Acad. Sci. U.S.S.R., Moscow). *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1955, 501-11; *Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.* 1955, 441-9 (Engl. translation).—The passage of methylcyclohexane at 400° and 20, 35, and 50 atm. H over dispersed Pt, Pd, Rh, and Ru on Al_2O_3 and SiO_2 was studied. At 20 atm. the main reaction is the formation of MePh; with $Rh\text{-}SiO_2$ catalyst the highest content of C_6H_6 (32%) was attained. Along with dehydrogenation, there occur isomerization reactions which yield isomeric dimethylcyclopentanes, as well as demethylation reactions. Usually the isomerization reactions with ring contraction are favored by higher operating pressures. Methylcyclohexane is catalytically converted to dimethylcyclopentanes by contact with Al_2O_3 or SiO_2. $Pt\text{-}Al_2O_3$ and $Pd\text{-}Al_2O_3$ yield principally *trans*-1,2-dimethylcyclopentane. $Rh\text{-}Al_2O_3$ and $Ru\text{-}Al_2O_3$ yield in addn. appreciable amounts of *cis*- and *trans*-1,3-dimethylcyclopentanes. Small amts. of cyclohexane are also formed. G. M. Kosolapoff

(5)

RM

LEVINA, R.Ya.; MEZENTSOVA, N.N.; TRESHCHOVA, Ye.G.

Synthesis of hydrecarbons; synthesis of hem-dimethylcyclopentane from cyclopentadiene. Dokl.AN SSSR 104 no.4:549-551 O '55.
(MLRA 9:2)

1.Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
Predstavleno akademikom A.N.Nesmeyanovym.
(Cyclopentane)

Trashcheva, E.

8

Chem

Reduction of unsymmetrical diene hydrocarbons with calcium hexaammoniate. B. A. Kazanskii, I. V. Gostunskaya, E. A. Davankova, and E. G. Treshchova (M. V. Lomonosov State Univ., Moscow). — *Doklady Akad. Nauk S.S.S.R.* 105, 485-8(1955); cf. *C.A.* 50, 5540b.—Dehydration of 3,4-dimethyl-3,4-hexanediol with H_3PO_4-Ac_2O gave 3-methyl-2-ethyl-1,3-pentadiene, b_{760} 133.3°, n_D^{20} 1.4760, d_{20} 0.7018. This (31.2 g.) was reduced with Ca hexaammoniate (from 40 g. Ca) yielding 28.5 g. mixed products identified as 3-methyl-2-ethyl-1-pentene, 3,4-dimethyl-2-hexene, and 3,4-dimethyl-3-hexene (13%, 52%, 35%, resp.). Reduction of 65.1 g. 2-methyl-2,4-hexadiene with Ca hexaammoniate (from 92 g. Ca) gave 53.7 g. products composed of 31% *trans*-2-methyl-3-hexene, 20% *trans*-4-methyl-2-hexene and 49% 2-methyl-2-hexene, identified by Raman spectra. The Raman spectrum of 2-methyl-2-hexene is (cm.$^{-1}$) 270(10), 325(3.5), 345(3), 378(3.5), 421-34(4.5), 463(6.5), 512(6.3), 547(0), 587(0), 726(4.0), 763(6.5), 789(8), 832(6), 869(21), 897(2), 981(0), 1040(14), 1072(22), 1089(26), 1117(0), 1144(16.5), 1170(12), 1196(11), 1240(9), 1268(4), 1290(9), 1320(14), 1339(20.5), 1353(12), 1382(51), 1437(65), 1458(71), 1674(126). G. M. Kosolapoff

LEVINA, R.Ya.; KIM CHAE-GIL.; TRESHCHOVA, Ye.G.

Synthesis of hydrocarbons. Part 54. Conversion of hydrocarbons of the cyclohexadiene series into bicyclic hydrocarbons containing a three-membered ring ; (0,1,3)-bicyclohexanes. Zhur.ob.khim. 26 no.3:920-926 Mr '56. (MLRA 9:8)

1. Moskovskiy gosudarstvennyy universitet.
(Bicyclohexane) (Cyclohexadiene)

Treshchiov, E. G.

TRESHCHOVA, Ye.G.

20-6-20/59

AUTHOR: LEVINA, R.Ya., SHABAROV, Yu. S., DAUKSHAS, V.K. and TRESHCHOVA, Ye.G.

TITLE: 2,4-Dimethylpentadien-1,3 in the Synthesis of Alkanes with Two Quaternary Carbon Atoms Separated by a CH_2-Group (Ditertiary Alkylmethanes).
2,4-dimetilpentadien-1,3 v sinteze alkanov s dvumya chetvertichnymi atomami ugleroda, razdelennymi CH_2-gruppoy (ditretichnoalkilmetanov. Russian).

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 6, pp 1286 - 1289 (U.S.S.R.)

ABSTRACT: In earlier reports the authors described the method of synthesis of ethylene-hydrocarbons with a quaternary carbon atom. It consists of a reaction between alkylmagnesiumbromides and unsaturated tertiar bromides of the allyle-type; the latter are easily produced by means of hydrobromization of dien-hydrocarbons of a ramitied structure with a conjugated system of double bindings. E.g. hydrobromide of 2,4-dimethylpentadien-1,3 served as initial substance for the synthesis of 2,4-trimethylalkenes. In this paper the authors worked out a new and easy synthe for the production of the rather hard obtainable paraffinhydrocarbons with four quarternary carbon atoms which are separated by a CH_2-group, that is of the ditertiary alkylmethanes. Here the same initial substance was used. The reaction mentioned is the first stage of this synthesis, where

Card 1/3

20-6-28/59

2,4-Dimethylpentadien-1,3 in the Synthesis of Alkanes with Two Quaternary Carbon Atoms Separated by a CH_2-Group (Ditertiary Alkylmethanes).

the yield could be increased from 30 to 45 %. Furthermore, the alkenes which had already a quaternary carbon atom were transformed by the action of hydrochloric acid into saturated tertiary chloride 2-chlorine-2,4-trimethylalkanes (yield 90%). The latter were then introduced into the reaction with magnesiumorganic compounds with sublimate as a catalyzer; the products of this last stage of the synthesis were alkanes with two quaternary carbon atoms separated by a CH_2-group. In the case of an interaction with magnesiumorganic compounds the saturated tertiary alkanes split off also hydrochloric acid and, with a yield of 50% form the initial alkanes. The latter were used for alkane-synthesis. The alkanes and alkanes were easily separated by destillation. The alkane yield amounted to from 15 - 25 % calculated according to the tertiary chloride introduced into the reaction, and to from 3o - 5o % according to that not utilized. Reactions with yields, methods, and spectroscopic constants are described. (3 tables, 6 Slavic references).

Card 2/3

20-6-28/59

2,4-Dimethylpentadien-1,3 in the Synthesis of Alkanes with Two Quaternary Carbon Atoms Separated by a CH_2-Group (Ditertiary Alkylmethanes.)

ASSOCIATION:	Not given
PRESENTED BY:	NESMEYANOV, A.N. , Member of the Academy.
SUBMITTED:	15 December 1956
AVAILABLE:	Library of Congress

Card 3/3

KESLER, Kh;PENTIN, Yu.A.;TRESHCHOVA, Ye.G.;TATEVSKIY, V.M.

Investigation of liquid and solid phase infrared absorption spectra of hydrocarbons at various temperatures. Opt. i spektr. 7 no.3:301-310 S '59. (MIRA 13:3)
(Hydrocarbons--Spectra)

KHROMOV, S.I.; BALENKOVA, Ye.S.; TRESHCHOVA, Ye.G.

Synthesis and contact transformations of cyclopentylcycloheptane in the presence of platinized carbon. Vest Mosk. un. Ser. mat., mekh., astron., fiz., khim. 14 no.2:143-148 '59 (MIRA 13:3)

1. Kafedra khimii nefti Moskovskogo gosuniversiteta.
(Cycloheptane) (Carbon) (Platinum)

SHUSHERINA, N.P.; GLADYSHEVA, T.Kh.; TRESHCHOVA, Ye.G.; LEVINA, R.Ya.

δ-Lactones and δ-lactams. Part 44: Behavior of 2,2,5,6-tetrasubstituted 3,4-dihydropyrans during their hydrolysis-transformation to cyclohexadienes. Zhur. org. khim. 1 no.4: 673-678 Ap '65. (MIRA 18:11)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

ZEN'KOVICH, I.A.; TRESHCHOVA, Ye.G.; TOPCHIYEVA, K.V.

Transformation of phenylcyclopropane on aluminum oxide with boron fluoride. Vest. Mosk. un. Ser. 2:Khim. 20 no. 5:19-22 S-O '65. (MIRA 18:12)

1. Kafedra fizicheskoy khimii Moskovskogo gosudarstvennogo universiteta. Submitted Dec. 15, 1964.

LUK'YANETS, Ye.A.; SHUSHERINA, N.P.; TRESHCHOVA, Ye.G.; KAZITSINA, L.A.;
LEVINA, R.Ya.

δ-Lactones and δ-lactams. Part 47: Spectroscopic study of δ-enollactones with a semicyclic and endocyclic double bond. Zhur. org. khim. 1 no.7:1194-1199 Jl '65. (MIRA 18:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

LEVINA, R.Ya.; KOSTIN, V.N.; GAL'PERN, M.G.; TRESHCHOVA, Ye.G.

Synthesis of hydrocarbons. Part 81: Cyclopropanes with quaternary carbon atoms in the ring and in a side chain. Zhur. ob. khim. 35 no.5:785-788 My '65. (MIRA 18:6)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

TRESHCHOVA, Ye.G.; EKKHARDT, [illegible]; YUR'YEV, Yu.K.

Correlations in the spectra of furan, thiophene, and selenophene derivatives. Zhur. fiz. khim. 38 no.2:295-303 F '64.
(MIRA 17:8)

1. Moskovskiy gosudarstvennyy universitet.

SHABAROV, Yu.S.; POTAPOV, V.K.; LEVINA, R.Ya.; TRESHCHOVA, Ye.G.

Cyclopropanes and cyclobutanes. Part 26: Stereoisomeric 1,2- and 1,3-methylphenylcyclobutanes. Vest. Mosk.un. Ser.2:Khim. 18 no.1:61-65 Ja-F '63. (MIRA 16:5)

1. Kafedra organicheskoy khimii Moskovskogo universiteta.
(Cyclobutane) (Isomers)

LEVINA, R.Ya.; GEMBITSKIY, P.A.; KOSTIN, V.N.; TRESHCHOVA, Ye.G.

Cyclopropanes and cyclobutanes. Part 27: Cyclopropylalkylbenzenes.
Zhur.ob.khim. 33 no.2:359-365 F '63. (MIRA 16:2)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Benzene) (Cyclopropyl group)

LEVINA, R.Ya.; GEMBITSKIY, P.A.; TRESHCHOVA, Ye.G.

Cyclopropanes and cyclobutanes. Part 29: Bromination of arylcyclopropanes. Zhur.ob.khim. 33 no.2:371-376 F '63. (MIRA 16:2)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Cyclopropane) (Bromination)

LEVINZ, R.Ya.; SHANAZAROV, K.S.; TRESHCHOVA, Ye.G.

Synthesis of 1,1,2-trimethyl-4-alkylcyclopentanes. Neftekhimiia 3 no.1:3-9 Ja-F '63. (MIRA 16:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Cyclopentane)

LEVINA, R.Ya.; SHANAZAROV, K.S.; KOSTIN, V.N.; TRESHCHOVA, Ye.G.

Synthesis of hydrocarbons. Part 78: New synthesis of 1,1,3,3,4-pentamethylcyclopentane. Zhur.ob.khim. 32 no.8:2637-2640 Ag '62. (MIRA 15:9)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Cyclopentane)

S/189/63/000/001/008/008
D204/D307

AUTHORS: Shabarov, Yu. S., Potapov, V. K., Levina, R. Ya. and Treshchova, Ye. G.

TITLE: Cyclopropanes and cyclobutanes. XXVI

PERIODICAL: Moscow. Universitet. Vestnik. Seriya II. Khimiya, no. 1, 1963, 61-65

TEXT: Stereoisomeric 1-methyl-2 phenylcyclobutanes and 1-methyl-3-phenylcyclobutanes were studied spectroscopically and an attempt was made to determine the cis- and trans-configurations. Raman bands at $\sim$1200 cm^{-1} of all isomers were slightly higher than the corresponding lines for alkylbenzenes. Cis- and trans-1-methyl-2-phenylcyclobutanes could not be distinguished in the Raman spectra. In the case of 1-methyl-3-phenylcyclobutanes, the higher boiling isomer A exhibited a broad, fairly intense band at 872 cm^{-1}, whilst the lower-boiling isomer B showed a corresponding band at 854 cm^{-1}. The $\sim$1200 cm^{-1} and 1600 cm^{-1} intensities were also higher

Card 1/2

Cyclopropanes and cyclobutanes ... S/189/63/000/001/008/008
D204/D307

in B, a property characteristic of trans-forms. Uv spectra of 1-methyl-2-phenylcyclobutanes in iso-octane showed that isomer A, distinguished by higher physical constants, absorbed more strongly in the 225 - 250 mμ region than the other isomer, B. The same was true of the A-form of 1-methyl-3-phenylcyclobutane, though to a lesser extent. Control tests with 1,2-diphenylcyclopropanes, whose configurations were established chemically, showed that trans-forms absorbed more strongly in the uv. Configurations of 1-methyl-2-phenylcyclobutanes may thus be assigned only from uv absorption spectra, whilst the configurations of 1-methyl-3-phenyl-cyclobutanes remain unresolved, since Raman and uv spectra gave contradictory indications. L. A. Kazitsyna measured the uv absorption. There are 3 figures and 1 table.

ASSOCIATION: Kafedra organicheskoy khimii (Department of Organic Chemistry)

SUBMITTED: June 28, 1961

Card 2/2

LEVINA, R.Ya.; KOSTIN, V.N.; GEMBITSKIY, P.A.; SHOSTAKOVSKIY, S.M.;
TRESHCHOVA, Ye.G.

Cyclopropanes and cyclobutanes. Part 24: Cyclopropylmesitylene.
Zhur.ob.khim. 32 no.5:1377-1382 My '62. (MIRA 15:5)

1. Moskovskiy gosudarstvennyy universitet.
(Mesitylene)

S/189/62/000/005/006/006
D204/D307

AUTHORS: Treshchova, Ye. G., Skvarchenko, V. R., and Levina, R. Ya.

TITLE: Raman spectra of various classes of hydrocarbons. Communication VIII. The spectra of polyalkylbenzenes

PERIODICAL: Moscow. Universitet. Vestnik. Seriya II, Khimiya, no. 5, 1962, 66-70

TEXT: The spectra of (a) 1,2-dimethyl-4-ethyl, (b) 1,2-dimethyl-4-butyl, (c) 1,4-dimethyl-2,3-diethyl, (d) 1,2,5-trimethyl-3,4-diethyl, and (e) 1,2,3,4-tetramethyl-5,6-diethyl benzenes were studied in the region of 150 - 1700 cm^{-1}, using a triprismatic glass ИСП-51 (ISP-51) spectrograph and a ФЭУ-17 (FEU-17) photomultiplier by a method described earlier. All compounds showed lines in the regions of 224 - 257, 547 - 556,

Card 1/2